

5(4)

SOV/76-33-2-21/42

AUTHORS:

Rysn, I. G., Idel's, S. L.

TITLE:

Kinetics of the Hydrolysis of Boron Ammine Trifluoride,  
 $H_3N:BF_3$  (Kinetika gidroliza triftor-ammin-bora,  $H_3N:BF_3$ )

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 2,  
 pp 374 - 380 (USSR)

ABSTRACT:

A method is described which (as it differs from previous experiments in reference 1) makes possible a determination of boron ammine trifluoride (I) in the presence of its hydrolysis products. A study of the hydrolysis kinetics of (I) could be carried out by determining the concentration of (I) as a function of the time without the  $BF_4^-$  ions produced in the reaction affecting the experimental results. The  $H_3N:BF_3$  was obtained by reacting ammonia and boron fluoride in benzene in a reaction vessel (Fig 1), and its fine crystalline powder was found to be readily soluble in water. The hydrolysis kinetics of (I) were titrimetrically determined in a solution neutral to methyl orange using an excess of  $CaCl_2$  and applying a TS-15 thermostat.

Card 1/3

Kinetics of the Hydrolysis of Boron Amine Trifluoride,  
 $H_3N:BF_3$

SOV/76-33-2-21/45

The experimental results obtained showed (Fig 2) that the hydrolysis of (I) is a reaction of the first order and is not catalyzed by hydrogen ions (Table 1), since the molecule  $H_3N:BF_3$  possesses no charge. The function of the rate constant in dependence upon the temperature can be represented by a straight line

$\lg k' = 14.70 - \frac{5245}{T}$  (2). This equation corresponds to an activation energy  $E = 27.2$  kcal/mol and an activation entropy  $\Delta S^\ddagger = 3.2$  cal/degree. The mechanism of the hydrolysis of the various double salts of boron fluoride will be treated in detail in a later paper. Preliminary experiments showed that the hydrolysis of the  $H_3N:BF_3$  is markedly accelerated in the presence of  $F^-$  and especially by  $OH^-$  ions. A hydrolysis mechanism for (I) is given, and it is mentioned that the hydrolysis of (I) in a NaF solution occurs in two parallel processes (in three including the effect of the  $OH^-$  ions). There are 4 figures, 3 tables, and 6 references, 4 of which are Soviet.

Card 2/3

Kinetics of the Hydrolysis of Boron Ammine Trifluoride, SOV/76-33-2-21/45  
 $H_3N:BF_3$

ASSOCIATION: Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo trans-  
porta (Dnepropetrovsk Institute for Railroad Transportation  
Engineering)

SUBMITTED: July 15, 1957

Card 3/3

Idel's, S.L. Gen Chem Sci (diss) "Investigation of the properties of the coordinating compounds of boron fluorides containing amines." Dnepropetrovsk, 1960, 16 pp (Dnepropetrovsk Chemico-technological Institute im P. E. Dzerzhinskiy) (KL, 3,-60, 120)

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86491

S/078/60/005/008/026/031/XX  
B023/B066

AUTHORS: Ryss, I. G., Idel's, S. L.

TITLE: Kinetics of Hydrolysis of Dimethyl-amino Boron Trifluoride

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 8,  
pp. 1756-1760

TEXT: Following their previous papers (Refs. 1-5) the authors studied the kinetics of hydrolysis of dimethyl-amino boron trifluoride,  $F_3B:NH(CH_3)_2$ . The compound was obtained by reaction of the carefully dried components in the presence of a benzene-ether mixture. Dimethyl-amino boron trifluoride is a colorless substance. When slowly heated in a closed capillary it melts at 50-51°C. It is sparingly soluble in benzene and easily soluble in ether, methanol, and water. Hydrolysis of  $F_3B:NH(CH_3)_2$  is a first-order reaction which proceeds according to the mechanism  $S_N1$ . Its rate constant (in  $min^{-1}$ ) as a function of temperature is expressed by the following equation:  $\log(0.4343 k) = 16.21 - \frac{6972}{T}$ . Its activation energy E

Card 1/2

Kinetics of Hydrolysis of Dimethyl-amino  
Boron Trifluoride

86491

S/078/60/005/008/026/031/XX  
B023/B066

equals 31.9 kcal; the activation entropy  $\Delta S^\ddagger$  = 7.2 entropy units. The values of E and  $\Delta S^\ddagger$  are in good agreement with the data of Ref. 2 where E and  $\Delta S^\ddagger$  were found to depend on the pK of the amine for the coordination compounds of  $\text{BF}_3$  with amines. The hydrolysis of  $\text{F}_3\text{B} : \text{NH}(\text{CH}_3)_2$  is accelerated by the presence of  $\text{F}^-$  ions. In a strongly alkaline medium  $\text{F}_3\text{B} : \text{NH}(\text{CH}_3)_2$  is decomposed rapidly. The mechanism of the action of  $\text{OH}^-$  and  $\text{F}^-$  ions is analogous to that of the hydrolysis of  $\text{BF}_3$  compounds with ammonia and methylenamine (Refs. 3,4). There are 4 figures, 2 tables, and 7 references: 5 Soviet, 1 US, and 1 British.

ASSOCIATION: Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo  
transporta (Dnepropetrovsk Institute of Railroad Engineers)

SUBMITTED: February 7, 1959

Card 2/2

RYSS, I.G.; IDEL'S, S.L.

Kinetics of the hydrolysis of boron trifluoride trimethylamine.  
Zhur. neorg. khim. 5 no.8:1761-1767 Ag '60. (MIRA 13:9)

1. Dnepropetrovskiy transportnyy institut.  
(Boron trifluoride)

KYSS, I.G.; IDEL'S, S.L.

Synthesis of methylaminotrifluoroborane, its properties and the kinetics of hydrolysis. Izv.vys.ucheb.zav.; khim.i khim.tekh.  
5 no.1:70-74 '62. (MIRA 15:4)

1. Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo  
transporta, kafedra khimii.  
(Borane) (Hydrolysis)



RYSS, I.G.; IDEL'S, S.L.

Triethylaminofluoroborine. Zhur.neorg.khim. 7 no.12:2674-  
2677 D '62. (MIRA 16:2)

1. Dnepropetrovskiy transportnyy institut.  
(Borine)

RYSS, I.G.; IOEL'S, S.L.

~~Synthesis and properties of K(F<sub>3</sub>BONH<sub>2</sub>)~~  
Synthesis and properties of K(F<sub>3</sub>BONH<sub>2</sub>). Zhur. neorg. khim. 10  
no.3:714-716 Mr '65. (MIRA 18:7)

1. Dnepropetrovskiy institut inzhenerov zhelezhodorozhnogo  
transporta.

RYSS, I.G.; NEFL'S, S.I.

Kinetics of the hydrolyses of the compound formed by boron trifluoride with trimethylamino oxide:  $F_3B:ON(CH_3)_3$ . Zhur. neorg.khim. 10 no.4:786-791 Ap '65. (MIRA 18:6)

1. Dnepropetrovskiy institut inzhenerov zheleznodorozhnogo transporta.

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CIA-RDP86-00513R00051832(

KAPLYANSKIY, Aleksandr Yevseyevich; IDEL'SON, B.I., red.; LEONOVA,  
B.I., tekhn.red.

[Methods of teaching the theoretic fundamentals of electrical  
engineering] Metodika preporavaniia teoreticheskikh osnov  
elektrotekhniki. Moskva, Gos.energ.isd-vo, 1959. 129 p.  
(MIRA 13:3)  
(Electric engineering--Study and teaching)

IDEL'SON, E.M.

124-11-12460

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 19 (USSR)

AUTHOR: Idel'son, E. M.

TITLE: Scale calculation for a multiplier-connector mechanism and the sensing element of an altitude recorder. (Raschet shkaly peredatochno-mnozhitel'nogo mekhanizma i chuvstvitel'nogo elementa vysotopistsa)

PERIODICAL: Tr. Leningr. in-ta aviats. priborostr., 1956, No 1, p. 14-15

ABSTRACT: Outlines a design method for an altitude recorder consisting of a corrugated membrane sensor, a connecting mechanism, and a rotating drum carrying a paper band. The recording pen is fastened to a link of a hinged four-bar linkage which is attached to an eccentric crank/connecting-rod mechanism, the piston of which, in turn, is attached to the membrane.

(V. A. Zinov'yev)

Card 1/1

IDEL'SON, E.M.

PHASE I BOOK EXPLOITATION  
APPROVED FOR RELEASE: Thursday, July 27, 2000

285

CIA-RDP86-00513R00051832

Idel'son, E.M., Povalyayev, A.V.

Rukovodstvo k laboratornym rabotam po kursu "Aviatsionnyye pribory"  
(Laboratory Manual for the Course in Aircraft Instruments)  
Leningrad, 1957. 170 p. 600 copies printed.

Sponsoring Agency: Leningradskiy institut aviatsionnogo priborostryeniya.

Tech. E.: El'kin, Ye.G.

PURPOSE: This is a manual for students taking courses in "Aircraft Instruments"

COVERAGE: This is the second part of a student's laboratory manual describing in separate lessons ten categories of aircraft instruments, explaining the theory of their operation, problems in troubleshooting, and instrument errors and their correction. The following types of instruments are mentioned: two-pointer aneroid

Card 1/4

Lesson No. 13. Magnetic compasses	38
Lesson No. 14. Altigraphs	58
Lesson No. 21. Indicators with large deviation angles	67
Lesson No. 22. Permanent-magnet moving-coil indicators with intraframe magnets	78
Lesson No. 23. Permanent-magnet moving-coil indicators with moving magnets	89
Lesson No. 24. AC selsyns for remote indicating instruments	106
Lesson No. 25. Balanced bridge circuit with a ratiometer as a resistance thermometer in aircraft	133
Lesson No. 26. Rheostat remote transmission as in the electrical remote indicating manometer	145

Card 3/4



Laboratory Manual for the Course (Cont.)	285
Appendix 1. Instruction for the use of moment-measuring dynamometers	161
Appendix 2. Instruction on the use of a bridge for measuring resistance	163
Appendix 3. Table for correction due to temperature of barometric indications in order to reduce them to 0° C	164
Appendix 4. Hypsometric table	165
Appendix 5. Basic characteristics of two-pointer altimeters	167
Appendix 6. Basic characteristics of air speed indicators	168
Appendix 7. Aerodynamic table	169
AVAILABLE: Library of Congress (TL589.I3)	

Card 4/4

IS/ad  
8-21-53

BASKAKOV, V.S.; VIKHLYAYEV, V.M.; GAVRILOV, R.I.; GRIBNEV, P.A.; ZHEMCHUZINI-KOVA, Ye.Ye.; IDRILOV, I.D.; MEN'SHIKOV, N.S.; MOROZOVA, Yu.G.; POPOV, V.A.; FEDOROV, S.P.; PAVLOV, Ya.M., dotsent, kandidat tekhnicheskikh nauk, redaktor; ZHIGLINSKIY, A.A., inzhener, redaktor; RYUNICH, K.N., inzhener, redaktor; SOKOLOVA, L.V., tekhnicheskiy redaktor

[A collection of drawings for parts used in machine building] Sbornik mashinostroitel'nykh chertezhei dlia detalirovok. Izd. 2-oe, dop. i perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 1 v., 50 l. (MIRA 10:2)

(Machinery--Design)

IDEL'SON, Iya Dmitriyevna; MEN'SHIKOV, N.S., red.

[Construction of the line of intersection of surfaces of geometrical bodies; textbook on descriptive geometry] Postroenie linii peresecheniia poverkhnostei geometricheskikh tel; posobie po kursu nachertatel'noi geometrii. Leningrad, Leningr. politekhn. in-t im. M.I.Kalonina, 1965. 65 p. (MIRA 18:4)

IDEL'SON, I. I.

The following is among dissertations of the Leningrad Polytechnic Institute imeni Kalinin:

"Investigation of the Tracking System of Low-Strength Alternating Current." 11 June 1951. An examination is made of the rather widespread in automation tracking system of alternating current with an electronic amplifier and two-phase condensor electric motor with a hollow rotor (fixed magnetic system). The possibility is established of using the contemporary method of analysis of a tracking system -- the method of logarithmic frequency characteristics, as developed in the Soviet Union, in ac systems.

SO: M-1048, 28 Mar 56

IDEL'SON, L. A.

"Alignment Exposures and Their Role in the General Technique of Roentgenological Investigation of the Kidneys and Upper Urinary Tract." Cand Med Sci, Central Sci Res Inst of Roentgenology and Radiology imeni V. M. Molotov, Moscow, 1955. (KL, No 12, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

IDEL'SON, L.A.

Diagnostic significance of spot radiographs in diseases of the kidneys and ureters. Vest.rent.i rad. no.1:56-60 Ja-F '55.(MIRA 8:5)

1. Is rentgenologicheskogo otdeleniya (zav. kandidat meditsinskikh nauk V.I.Petrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta imeni V.F.Vladimirovskogo (dir.P.M.Leonenko).

(KIDNEYS, diseases,

diag., x-ray)

(URETERS, diseases,

diag., x-ray)

IDEL'SON, L.A., kand.med.nauk

Roentgen diagnosis of uropneumonia. Urologia 23 no.2:42-45 Mr-Apr '58.

(MIRA 11:4)

1. Is rentgeno-radiologicheskogo otdela (sav. - kandidat meditsinskikh nauk V.I.Petrov) i urologicheskoy kliniki (sav. - prof. A.Ya.Abramyan) Moskovskogo oblastnogo nauchno-issledovatel'skogo instituta imeni M.F.Vladimirovskogo.

(KIDNEYS, calculi  
x-ray diag. (Rus))

IDEL'SON, L.A. - kand.med.nauk

Method for double contrasting of the renal cavities in diagnosing  
"invisible" calculi. Vest. rent. 1 rad. 36 no.4:82-83 J1-Ag '61.  
(MIRA 15:2)

1. Iz rentgeno-radiologicheskogo otdela (zav. - kand.med.nauk  
V.I.Petrov) i urologicheskoy kliniki (zav. - prof. A.Ya.Abramyan)  
Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo  
instituta M.P.Vladimirskogo (dir. P.M.Leonenko).  
(CALCULI, URINARY) (KIDNEYS - RADIOGRAPHY)



PETROV, V.; FOMIN, O.; SHKLOVSKAYA, R.; IDEL'SON, L.<sup>A</sup>; BAZHENOVA, A.

In memory of Iakov Grigor'evich Dillon; on the 10th anniversary of his death. Vest. rent. i rad. 37 no.2:82-83 Mr-Apr '62.

(MIRA 15:4)

(DILLON, IAKOV GRIGOR'EVICH, d.1951)

IDEL'SON, L.A.

Supplementary method of examination in X-ray diagnosis of kidney tumors. Vop. klin. pat. no.2:123-135 '61 (MIRA 16:12)

1. Iz rentgeno-radiologicheskogo otdela (zav.-starshiy nauchnyy sotrudnik V.I.Petrov) i urologicheskoy kliniki (zav. prof. A. Ya. Abramyan) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni Vladimirovskogo.

IDEL'SON, L.I.

Determination of urinary uropepsin as gastric function test. Terap.  
arkh. 30 no.2:52-56 F '58. (MIRA 11:4)

1. Iz 4-y kafedry terapii (sav.-chlen-korrespondent AMN SSSR prof.  
P.I. Yegorov) Tsentral'nogo instituta usovershenstvovaniya vrachey.  
(UROPEPSIN, in urine,  
determ. as gastric funct. test (Rus)  
(STOMACH, function tests,  
urinary uropepsin determ. (Rus)

IDEL'SON, L. I., Cand of Med Sci -- (diss) "Vitamin B<sub>12</sub> Exchange in Patients With an Increased Secretion of Gastromucoprotein," Moscow, 1959, 12 pp (Central Institute for the Advanced Training of Physicians) (KL, 6-60, 126)

IDEL'SON, L.I.

Absorption of vitamin B12 during increased secretion of  
gastromucoprotein. Probl.gemat. i perel.krovi 4 no.4:25-29  
Ap '59. (MIRA 12:6)

1. Iz IV kafedry terapii (sav. - chlen-korrespondent AMN SSSR  
prof.P.I.Yegorov) Tsentral'nogo instituta usovershenstvovaniya  
vrachey.

(PROTEINS,

gastric mucoproteins in gastric juice, relation  
to absorption of vitamin B12 in peptic ulcer (Rus))

(GASTRIC JUICE,

mucoproteins, relation to vitamin B12 absorption  
in peptic ulcer (Rus))

(VITAMIN B12, metab.

gastric absorption, relation to gastric juice  
mucoproteins in peptic ulcer (Rus))

(PEPTIC ULCER, metab.

vitamin B12 absorption, relation to muco-  
proteins in gastric juice (Rus))

IDEL'SON, L.I.

Gastromucoprotein and vitamin B<sub>12</sub> in gastric and duodenal ulcers  
[with summary in English]. Terap.arkh. 31 no.3:26-32 Mr '59.

(MIRA 12:4)

1. Iz 4-y kafedry terapii (sav. - chlen-korrespondent AMN SSSR  
prof. P.I. Yegorov) Tsentral'nogo instituta usovershenstvovaniya  
vrachey na baze Tsentral'noy klinicheskoy bol'nitsy Ministerstva  
putey soobshcheniya.

(VITAMIN B<sub>12</sub>, metab.

blood & urine, in peptic ulcer (Rus))

(GASTRIC JUICE,

mucoproteins, in peptic ulcer (Rus))

(PROTEINS, metab.

mucoproteins in gastric juice in peptic  
ulcer (Rus))

IDEL'SON, L. I.

Erythropoietic activity of urine in erythremias and anemias.  
Probl. gemat. i perel. krovi no.12:11-16 '61.  
(MIRA 15:6)

1. Iz gruppy chlen-korrespondenta AMN SSSR prof. P. I. Yegorova  
na base Tsentral'noy klinicheskoy bol'nitsy Ministerstva putey  
soobshcheniya SSSR.

(URINE) (ANEMIA) (ERYTHREMIA)

IDEL'SON, L.I.; ZHUKOVSKAYA, Ye.D.

Cobalt content in the urine of healthy people. Probl. gemat. i perel.  
krovi 8 no.7:24-26 J1 '63. (MIRA 17:10)

1. Iz gruppy chlena-korrespondenta AMN SSSR prof. P.I. Yegorova pri  
Institute terapii (dir. -deystvitel'nyy chlen AMN SSSR prof. A. L.  
Myasnikov) AMN SSSR na baze Tsentral'noy klincheskoy bol'nitsy Minis-  
terstva putey soobshcheniya SSSR.



LITVINSON, L. I.; ZHUKOVSKAYA, Ye. D.

"Studies of erythropoietic action of cobalt in anemia."

report submitted to 10th Cong, Intl Society of Hematology, Stockholm, Sweden,  
30 Aug-4 Sep 64.

Central Hospital, Min of Transport, Moscow.

IDEL'SON, L.I.; KAFAROVA, D.D.; ZVEREVA, L.A.; GUDIM, V.I.

Urinary excretion of erythropoietin. Probl. gemat. i perel.  
krovi 9 no.4:18-22 Ap '64. (MIRA 17:11)

1. Gruppya chlena-korrespondenta AMN SSSR prof. P.I. Yegorova  
na baze Tsentral'noy klinicheskoy bol'nitsy Ministerstva putey  
soobshcheniya i opytno-proizvodstvennoy laboratorii Vsesoyuznogo  
instituta eksperimental'noy endokrinologii (dir. - prof. Ye.A.  
Vasyukova), Moskva.

IDEL'SON, L.I.; ZHUKOVSKAYA, Ye.D.

Erythropoietic effect of cobalt in anemia. Probl. gemat. i perel.  
krovi 10 no.1:3-10 Ja '65. (MIRA 19:1)

1. Gruppya chlena-korrespondenta AMN SSSR prof. P.I. Yegorova na  
baze Tsentral'noy klinicheskoy bol'nitsy Ministerstva puty  
soobshcheniya, Moskva.

IDEL'SON, M. YA.

IDEL'SON, M. YA.

6654 IDEL'SON, M. Ya. "Mekhanicheskaya obrabotka trudnoobrabatyvayemykh metallov M., 1954 52 s. s. ill. 20 sm (K-vo transp. mashinostroyeniya SSSR. Vsesoyuz. proyektnotekhnol. in-t VPTI. Zarubezhnaya tekhnika. 1000 EKZ B. ts. "a obl. avt. ne ukazan. Bibliogr: 2. 51 (55-3000) 621.9 plus (016.3)

SO KNIZHNIYA LETOPIS NO' 6, 1955

IDEL'SON, N.N.; SHOR, L.M.

Experience in treating neglected congenital pyloric stenosis.  
Pediatrics no.3:69-71 My-Je '55. (MLRA 8:10)

1. Iz detskogo spetsializirovannogo otdeleniya (sav.N.N.  
Idel'son, glavnyy vrach L.M.Shor) Kaliningradskoy oblastnoy  
bol'nitsy.

(PYLORUS, stenosis  
congen., surg.indic.)

BULYCHEVA, G.F.; IDEL'SON, N.N.; KNYAZEVS KAYA, Ye.G.; STROYKOVA, A.S.

Experience in the treatment of hypothyroidism in children.

Pediatrics 42 no.8:7-13 Ag'63

(MIRA 17:4)

1. Iz endokrinologicheskogo otdeleniya 1-y detskoy bol'nitsy  
(glavnyy vrach - zasluzhennyy vrach RSFSR A.I. Stepanova) Smol'-  
ninskogo rayona Leningrada (nauchnyye rukovoditeli - prof.  
V.G. Baranov i prof. A.F. Tur.)

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IDEL'SON, Ye.M.

Analysis of butyl aerefleats and their mixtures with xanthogenate.  
TSvet.net 29 no.9:11-18 8 '56. (MIRA 9:9)

1.Gosudarstvennyy Institut tsvetnykh metallov.  
(Chemistry, Analytic--Quantitative) (Flotation)



AUTHORS: Idel'son, Ye.M. and Livshits, A.K.

SOV/136-58-5-2/22

TITLE: Gas Evolution from Diaryldithiophosphates (Phenol Aerofloats) (Vydeleniye gazov iz diarliditiofosfatov (fenol'nykh aeroflotov) )

PERIODICAL: Tsvetnyye Metally, 1958, Nr 5, pp 8 - 13 (USSR)

ABSTRACT: The object of the work described was to find the conditions under which hydrogen sulphide and other toxic gases are evolved from aerofloat. The experiments were carried out with and without the addition of various materials which might be expected to stimulate gas evolution. A stream of air or nitrogen was passed through the test liquid, the temperature being varied in the range 20 - 60 °C. Comparative tests were carried out with the ordinary cresyl and xylene as well as the ammonia-cresyl and ammonia-xylene aerofloats, whose production is now being undertaken. The toxic action of the evolved gas is attributed to the presence in it of hydrogen sulphide, no hydrogen arsenide being found in the gas and very little, if any, hydrogen phosphide. It was found that contamination of the aerofloat (especially with water) and heating increased hydrogen-sulphide evolution; that the presence of precipitates of

Card 1/2

Gas Evolution from Diaryldithiophosphates

SOV/136-58-5-2/22

unreacted phosphorus pentasulphide had this effect only at temperatures over 50 °C and that hydrogen sulphide dissolved in the aerofloat is removed by heating to 140 °C (in the absence of phosphorus pentasulphide or impurities promoting the decomposition of the aerofloat). The importance is indicated of protecting stored aerofloat from heat and contamination and of adhering to the safety instructions in supplement Nr 1 to order Nr 190 of the former Ministry of Non-ferrous Metallurgy of the USSR dated May 20, 1954. Hydrogen-sulphide evolution from the ammonia aerofloats was found to be non-existent or 30-100 times less than from the ordinary cresyl and xylene aerofloats. There are 6 figures, 3 tables and 3 Soviet references.

ASSOCIATION: Gintsvetmet

Card 2/2

1. Diaryldithiophosphates--Properties
2. Hydrogen sulfides
- Production
3. Poisonous gases--Production

IDEL'SON, Ye. M.

Determining moisture content in xanthogenates by the volumetric  
analysis of gas. Biol. TSIIH tsvet. met. no. 7:15-17 '58.

(MIRA 11:7)

(Titration)  
(Xanthic acid)

GEL'PERIN, N.I.; IDEL'SON, Ye.M.; LIVSHITS, A.K.; ZIL'BERG, V.I.; BORISENKO,  
A.T.; GABRIYELOVA, L.I.

Improving methods of xanthate production. Report no.1: Preparation  
of potassium and sodium butyl and theyl xanthates from anhydrous  
alcoholates. Sbor.nauch.trud.GINSTVETMET no.16:153-169 '59.

(Xanthic acid)

(Alcoholates)

(MIRA 14:4)

GEL'PERIN, N.I.; IDEL'SON, Ye.M.; LIVSHITS, A.K.; BORISENKO, A.T.;  
GABRIYELOVA, L.I.; ZIL'BERG, V.I.

Improving methods of xanthate production. Report no.2: Preparation  
of potassium and sodium isobutyl and isoamyl xanthates from practically  
anhydrous alcoholates. Sbor.nauch.trud.GINTSVETMET no.16:170-179  
'59. (MIRA 14:4)

(Xanthic acid)

(Alcoholates)

IDEL'SON, Ye.M.; GEL'PERIN, N.I.; LIVSHITS, A.K.; GABRIYELOVA, L.I.

Improving method of xanthate production. Report no.3, Obtaining  
high-quality xanthates from water-alcohol alkali solutions. Sbor.  
nauch.trud.GINTSVETMET no.16:180-190 '59. (MIRA 14:4)  
(Xanthic acid)

IDEL'SON, Ye.M.

Determination of carbon disulfide present in the reaction mixture  
used in the synthesis of xanthogenate. Zav.lab. 26 no.8:947-948  
'60. (MIRA 13:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh  
metallov.  
(Carbon disulfide) (Xanthic acid)

GEL'PERIN, N.I.; IDEL'SON, Ye.M.; LIVSHITS, A.K.; BORISENKO, A.T.;  
ZIL'BERG, V.I.

Improved method for the production of xanthates. Report no.4:  
Preparing xanthates by the continuous method from isobutyl,  
butyl SK, and isopropyl alcohol. Sbor. nauch. trud. Gintsvet-  
meta no.19:255-262 '62. (MIRA 16:7)

(Xanthic acid)



IDES, P.M.; YUROV, S.I.

Angular measurement in triangulation with long sides. Geod.1  
kart. no.4:16-19 Ap '62. (MIRA 15:12)  
(Triangulation)

ALEKSANDROVA, V.P.; BEREZINA, N.K.; BERNSHTEYN, A.I.; BERNSHTEYN, S.E.;  
BLOKH, R.L.; ZINKOVETSKAYA, T.S.; IDESIS, Ye.S.; SMOLENKOVA, O.N.;  
TOSHINSKIY, I.I.; TSARFIS, P.G.; SHABAD, Ye.T.; SHEYNBERG, O.A.

Professor E.IA. Stavskaya; obituary. Vop. kur., fizioter. i lech.  
fiz. kul't. 26 no. 2:191 Mr-Ap '61. (MIRA 14:4)  
(STAVSKAYA, EVGENIYA IAKOVLEVNA, 1892-1960)

KATSENOVICH, A.L., prof.; IDESSIS, I.G.

Treatment of typhoid and paratyphoid diseases by a combination of  
small doses of antibiotics. Med. zhur. Uzb. no.3:32-37 Mr '61.  
(MIRA 14:5)

1. Iz kafedry infektionnykh bolezney sanitarno-gigiyenicheskogo  
i pediatricheskogo fakul'teta Tashkentskogo gosudarstvennogo  
meditsinskogo instituta.

(TYPHOID FEVER)

(PARATYPHOID FEVER)

(ANTIBIOTICS)

IDIATULINA, A.F.

Effect of ipazine on the content and composition of free sugars  
and amino acids in the cotton plant. Vop.biol.i kraev.med. no.3:  
127-131 '62, (MIRA 1643)  
(IPAZINE) (SUGARS) (AMINO ACIDS) (COTTON)

IDIATULINA, A.F.

Effect of simazine on some physiological and biochemical  
processes in cotton. Vop. biol. i kraev. med. no.4:22-24  
'63. (MIRA 17:2)

17.1202  
26.5500

S/147/61/000/004/015/021  
E194/E135

AUTHORS: Fedorov, I.G., Shchukin, V.K., Mukhachev, G.A., and  
Idiatullin, N.S.

TITLE: Heat transfer and hydraulic resistance of channels  
with pressed spherical projections

PERIODICAL: Izvestiya vysshikh uchebnykh zavedoniy,  
Aviatsionnaya tekhnika, no.4, 1961, 120-127

TEXT: Plate type heat exchangers are particularly suitable  
for aviation because of their small size and weight. Sheets with  
pressed projections are particularly useful because the  
projections increase the strength and improve the cooling.  
V.G. Fastovskiy and Yu.F. Petrovskiy (Ref.4: Teploenergetika, no.1,  
1959) made an experimental study of a heat exchanger in which the  
rectangular ducts had spherical projections on the air side and  
hollows on the steam side. The work showed that the heat transfer  
coefficient of such surfaces was greater by a factor of 2.5-2.8  
than for smooth surfaces. The improvement is attributed to  
increased turbulence of the flow. The work described here was

Card (1/5)

Heat transfer and hydraulic ....

S/147/61/000/004/015/021  
E194/E135

carried out on rectangular ducts consisting of two plates with spherical projections. The projections were of various transverse pitch and were located both in honeycomb and straight line order. The main characteristics of the ducts are given in the table. The relationship  $Nu = f(Re)$  was investigated in the range of Reynolds numbers 1000 to 16500, and  $\xi = f(Re)$  in the range  $Re = 500$  to 18000. The experimental rig is described. The water sides of the heat exchangers were filled to one third of their height with distilled water and electric heaters were installed to evaporate the water. The water vapour condensing on cooling surfaces gives up its latent heat of vapourisation to a flow of air passing through the ducts of the heat exchanger. The usual measurement arrangements were made. Each of the four bundles described in the table was investigated under about twenty conditions with different rates of air flow covering the Reynolds number range from 500 to 18000; in each case the measurements were repeated after 15-20 minutes. A procedure was worked out and the operation of the equipment was checked by using a smooth-walled plate-type heat exchanger. Further tests

Card 2/ 6

Heat transfer and hydraulic ...

S/147/61/000/004/015/021  
E194/E135

showed that the heat balance error calculated from the input to the internal heater and from the change in enthalpy of the cooling air is about 6-10%. The r.m.s. error of the determination of air flow, and of the Re and Nu numbers and of the resistance coefficient are, respectively, 2.2, 2.5, 4.5 and 5%. Heat transfer results are well represented by the following equations.

With honeycomb arrangement:

$$Nu_f = 0.54 \times 10^{-4} Re_f^{1.55} \quad (Re = 1000-2300), \quad (3)$$

$$Nu_f = 0.95 \times 10^{-3} Re_f^{1.17} \quad (Re = 2300-10000), \quad (4)$$

$$Nu_f = 0.0276 Re_f^{0.8} \quad (Re = 10000-16500). \quad (5)$$

With the In-Line arrangement:

$$Nu_f = 0.44 \times 10^{-4} Re_f^{1.55} \quad (Re = 1000-2300), \quad (6)$$

Card 3/6



Heat transfer and hydraulic ...

S/147/61/000/004/015/021  
E194/E155

$$Nu_f = 0.8 \times 10^{-3} Re_f^{1.17} \quad (Re = 2300-10000), \quad (7)$$

$$Nu_f = 0.0248 Re_f^{0.8} \quad (Re = 10000-16500). \quad (8)$$

The results show that for given values of the Reynolds number the Nu criterion is 15-20% higher in bundles with honeycomb arrangement of projections than those with the in-line arrangement. The Nu criterion of the bundles is greater by a factor of 2.1-1.65 than the Nu criteria for a bundle of flat sheets in the Re number range 2500-16500. These results are not entirely in line with those given in Ref.4, and the reasons for this are discussed. The following expressions adequately represent the results of resistance tests:

$$\xi = \frac{A}{(Re_f^{0.30})} \quad (Re = 500-2300), \quad (9)$$

$$\xi = \frac{B}{Re_f^{0.089}} \quad (Re = 2300-18000). \quad (10)$$

Card  
4/6

Heat transfer and hydraulic ...

S/147/61/000/004/015/021  
E194/E135

The values of the coefficients A and B in Eqs (9) and (10) are given in the table. The results show that ducts with spherical projection have higher resistance than do smooth ducts, the actual amount depending upon the pitch and arrangement of the projections. There are 3 figures and 1 table.

ASSOCIATION: Kafedra teplovykh dvigateley, Kazanskiy aviatsionnyy institut (Department of Heat Engines, Kazan' Aviation Institute)

SUBMITTED: March 10, 1961

Key to Table Headings: (1) Number of bundle; (2) Arrangement of projections; (3) Shape of duct; (4) Length of bundle, mm; (5) Height of bundle, mm; (6) Equivalent diameter  $d_{\text{эк}}$ , mm; (7) Transverse pitch  $S_1$ , mm; (8) Longitudinal pitch  $S_2$ , mm; (9) Coefficient A; (10) Coefficient B.

Card 5/6

S/096/62/000/006/009/011  
E194/E454

24.5200  
AUTHORS: Fedorov, I.G., Engineer, Idiatullin, N.S., Engineer, Shchukin, V.K., Candidate of Technical Sciences, Mukhachev, G.A., Candidate of Technical Sciences

TITLE: Heat transfer and hydraulic resistance of slot shaped ducts with conical indentations in honeycomb arrangement

PERIODICAL: Teploenergetika, no.6, 1962, 57-60

TEXT: Heat transfer and air resistance tests were made on a plate type heat exchanger with ducts 3 mm wide, 145 mm high and 475 mm long. The ducts were made of 0.5 mm sheet in which had been pressed indentations in the shape of truncated cones with a base diameter of 6.5 mm, cone angle of 30° and height of 1.5 mm, arranged in honeycomb order at various pitches. The tips of the cones of one plate were in contact with the corresponding tips of indentations in the opposite plate of the duct. Two such sheets soldered together at the edges and with fixing flanges attached formed the test bundles. Electrically heated water supplied heat to the test bundle and it was removed by a flow of air. The test arrangements are described. The tests were carried out with a

Card 1/3

Heat transfer and hydraulic ,...

S/096/62/000/006/009/011  
E194/E454

constant wall temperature of 110°C with an inlet air temperature of 22 to 23.5°C and a discharge air temperature ranging from 91 to 106°C, the mean air pressure in the duct was 1.01 to 1.23 kg/cm<sup>2</sup>, the air flow 2 to 92 kg/hour and the specific thermal loading (0.18 to 11.6) x 10<sup>3</sup> kcal/m<sup>2</sup> hour. The difference between the heat input to the heaters and the heat gained by the air was 6 to 10%. The methods used to check the equipment are described. For all the investigated ducts the experimental points lie within  $\pm 6\%$  of three straight lines of various slopes. The following equation applies for Reynolds numbers  $Re = 750$  to  $2500$

$$Nu_f = 0.155 \times 10^{-3} Re_f^{1.41} \quad (1)$$

for  $Re = 2500$  to  $10000$

$$Nu_f = 1.017 \times 10^{-3} Re_f^{1.17} \quad (2)$$

and for  $Re = 10000$  to  $18000$

$$Nu_f = 0.0315 Re_f^{0.8} \quad (3)$$

Card 2/3

Heat transfer and hydraulic '...

S/096/62/000/006/009/011  
E194/E454

For Reynolds numbers of 2000, 4000 and in the range from 10000 to 18000 the Nusselt criterion for ducts with conical indentations is greater than for a smooth duct by 2.0, 1.62 and 1.75 times respectively. The surface increase caused by the indentations ranges from 5 to 10% so the main cause of greater heat exchange with indentations is increased turbulence of flow. The resistance of the ducts was measured under both isothermal and nonisothermal conditions and the results are given in the form of empirical formulae with constants tabulated for ducts of different shape and pitch. There are 3 figures and 1 table.

ASSOCIATION: Kazanskiy aviatsionnyy institut  
(Kazan' Aviation Institute)

Card 3/3

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00051832

BORISOVITSYN, Yu.A., inzh.; IDIATULLIN, N.S., inzh.; FILIN, V.A., inzh.

Investigating models of exhaust noise silencers for gas turbine plants. Sudostroenie 30 no.2:26-27 F '64. (MIRA 17:4)

IDINA, M.S.

Method for studying the duration of survival of *Shigella dysenteriae*  
in the external environment. Zhur.mikrobiol.eoid. i immun.  
no.1:71-76 Ja '58. (MIRA 11:4)

1. Iz Instituta epidemiologii, mikrobiologii i gigiyeny imeni  
Pastera.

(SHIGELLA DYSENTERIAE,  
survival, investigation method (Rus)

IDINA.M.S.

Study of the duration of retention and the quantity of dysenteryx microbes on objects of daily use in an experiment with naturally infected excrements of patients. Trudy Len. inst. epid. i microbiol. 18:256-270'58. (MIRA 16:7)

1. Iz laboratorii kishhechnykh infektsiy Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera (zav.E.M. Novgorodskaya)

(DYSENTERY--MICROBIOLOGY)

17(2;6)

AUTHOR:

Idina, M.S.

SOV/16-59-9-38/47

TITLE:

A Method of Determining the Efficacy of the Various Methods of  
Dysentery Disinfection. Author's Summary

PERIODICAL:

Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, v. 30  
Nr 9, pp 132 (USSR)

ABSTRACT:

The author made a check to determine whether her quantitative  
microbiological method (explained in "Zhurnal mikrobiologii, epi-  
demiologii i immunobiologii", 1958, Nr 1) for establishing the  
length of preservation of *Shigella dysenteriae* on common objects,  
contaminated with the excreta of dysentery patients, could be  
used for testing the efficacy of various methods of dysentery  
disinfection. Several types of liquid disinfection with chlora-  
mine were tried out and the results indicated that the quantita-  
tive microbiological method was effective and accurate.

Card 1/2

A Method of Determining the Efficacy of the Various Methods of Dysentery Disinfection. Author's Summary

SOV/16-59-9-38/47

ASSOCIATION: Leningradskiy institut epidemiologii i mikrobiologii imeni Paste-  
ra (Institute of Epidemiology and Microbiology imeni Pasteur,  
Leningrad)

SUBMITTED: March 2, 1959

Card 2/2



IDINA, M.S.

Duration of survival of dysenterial bacilli in feces. Zhur. mikro-  
biol., epid. i immun. 30 no. 12:91-95 D '99. (MIRA 13:5)

1. Iz Leningradskogo instituta epidemiologii i mikrobiologii imeni  
Pastera.

(FECES microbiol.)  
(SHIGELLA)

IDINA, M. S., Cand Med Sci -- (diss) "Materials for the study of the length of preservation of dysenteric microbes in the open air. (Experimental investigation)." Leningrad, 1960. 21 pp; (First Leningrad Medical Inst im Academician I. P. Pavlov); 300 copies; price not given; (KL, 25-60, 139)

IDINA, M.S.

Studying the length of preservation and the quantity of dysentery germs on objects in an experiment with naturally infected feces of patients. Zhur. mikrobiol. epid. i immun. 31 no. 5:109-110 My '60. (MIRA 13:10)

1. Iz Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny im. Pastera.

(SHIGELLA PARADYSENTERIAE)

PODOPLEKIN, V.D.; IDINA, M.S.

Isolation of ECHO viruses from man and their identification by the haemagglutination inhibition test. Acta virol. 7 no.3: 233-240 My '63.

1. The Pasteur Institute of Epidemiology and Microbiology, Leningrad, U.S.S.R.

(ECHO VIRUSES)  
(ENTEROVIRUS INFECTIONS)

(HEMAGGLUTINATION INHIBITION TESTS)  
(DIAGNOSIS)

IDINA, M.S.

Quantitative microbiological study as a method for the evaluation of the effectiveness of various disinfection methods used in dysentery. Trudy Len. inst. epid. i mikrobiol. 24:163-182 '63.  
(MIRA 18:10)

1. Iz laboratorii kishhechnykh infektsiy (zav.- prof. E.M. Novgorodskaya) Instituta epidemiologii i mikrobiologii imeni Pastera.

RODSHTEYN, O.A.; IDINA, M.S.

Results of the microbiological, virological and clinical studies of acute intestinal diseases in infants. Report No.1: Results of microbiological and virological examinations of infants hospitalized for acute intestinal disorders. Trudy Len. inst. epid. i mikrobiol. 26:173-180 '64. (MIRA 18:12)

PODOPLEKIN, V.D.; IDINA, M.S.

Hemagglutinating properties of enteroviruses and use of the hemagglutination reaction and the hemagglutination inhibition test for practical purposes. Report No.3; Results of the study of the hemagglutinating activity of freshly isolated viruses from the ECHO group and possibilities for the practical use of hemagglutination tests. Trudy Len. inst. epid. i mikrobiol 26:284-298 '64.

(MIRA 18:12)

IDINA, M.S.; RODSHTEYN, O.A.; PODOPLEKIN, V.D.

Results of the microbiological, virological and clinical studies of acute intestinal diseases in infants. Report No.2: Identification of cytopathogenic agents isolated from the intestinal tract of children hospitalized for acute intestinal disorders. Trudy Len. inst. epid. i mikrobiol. 26:181-198 '64.

(MIRA 18:12)

1. Iz laboratoriy kishchenykh infektsiy i poliyemiyelita Instituta imeni Pastera, Leningrad i kafedroy pediatrii i Leningradskogo meditsinskogo instituta imeni akademika Pavlova.



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**CIA-RDP86-00513R00051832(**

PHASE I BOOK EXPLOITATION

SOV/5112

Idlin, Mikhail Markovich, and Nikolay Danilovich Safonov

Osnovy sborki, regulirovki, i kontrolya aviatsionnykh elektro-giroskopicheskikh priborov (Principles of the Assembly, Regulation, and Checking of Aircraft Gyroelectrical Instruments) Moscow, Oborongiz, 1960. 354 p. Errata slip inserted. 6,500 copies printed. (Series: Bibliotekha rabocheho aviatsionnoy promyshlennosti)

Ed. (Title page): G. A. Slomyanskiy, Candidate of Technical Sciences, Docent; Reviewer: V. I. Bostorin, Docent; Ed. of Publishing House: F. G. Tubyanskaya; Tech. Ed.: N. A. Pukhlikova; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE: This book is intended for students of production engineering courses, for engineering schools for foremen who lack higher education, and as an aid in training and improving the qualifications of electrical instrument fitters.

~~Card 1/13~~

Principles of the Assembly (Cont.)

SOV/5112

COVERAGE: The book examines the fundamentals of the assembly process of gyroelectrical instruments, with a brief review of basic information on mechanics and electricity. Results of the experience of industrial innovators and the personnel of a number of leading instrument plants are included. The authors thank M. P. Kovalev, Candidate of Technical Sciences, and V. I. Bostorin, Engineer. There are 19 references, all Soviet.

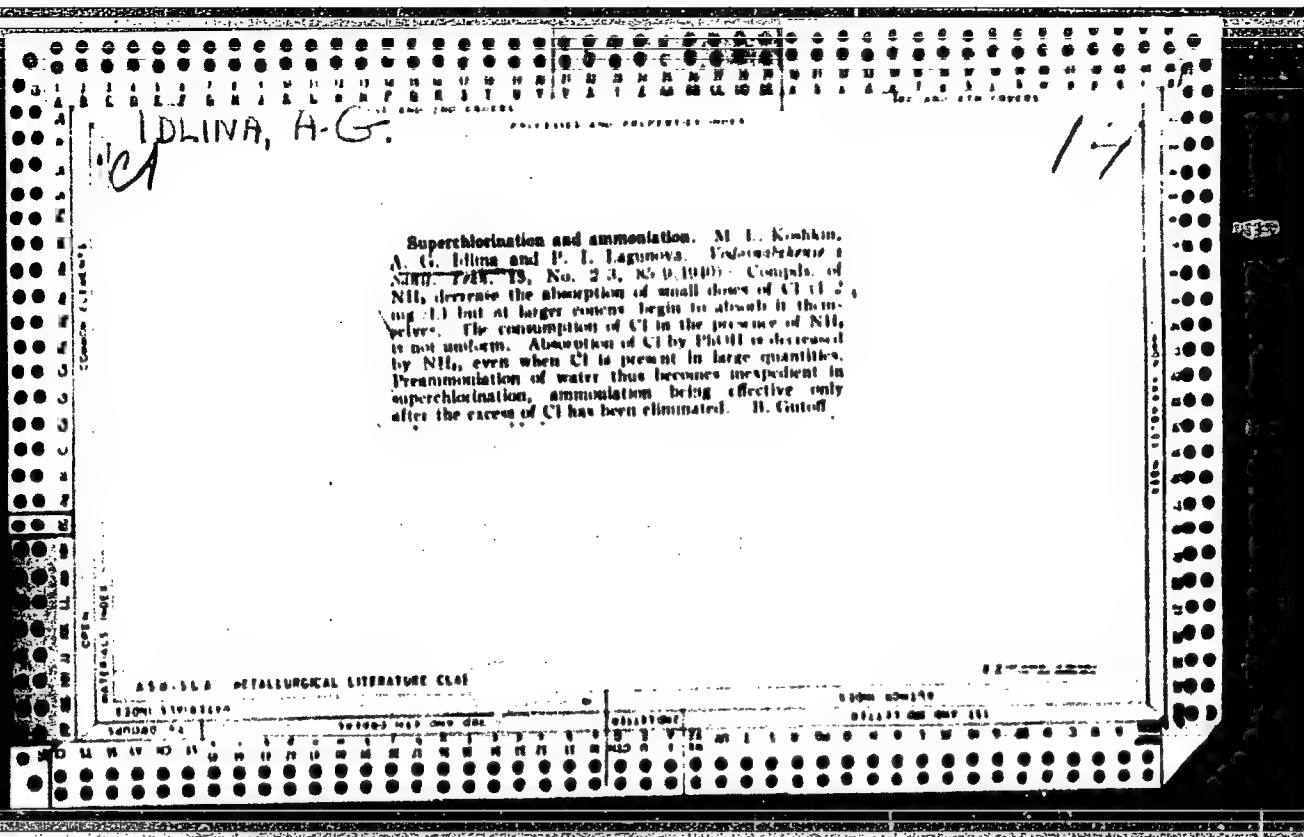
TABLE OF CONTENTS:

Introduction	3
Ch. I. Some Information on Mechanics	
1. Mechanical motion. Inertia. Force. Equilibrium of forces. Mass	5
2. Scalar and vectorial values	9
3. Composition and resolution of parallel forces	11
4. Rotary motion. Angular velocity. Angular velocity of the diurnal rotation of the earth	13

~~Card 2/13~~

IDLIN, MIKHAIL MARKOVICH

Osnovy sborki, regulirovki i kontrolya aviatsionnykh  
elektrogiroskopicheskikh priborov [by] M. M. Idlin  
[1] N. D. Safonov. Moskva, Oborongiz, 1960.  
354 p. illus., diagrs., graphs, tables. 23cm.  
(Bibliotekha Rabochego Aviatsionnoy Promyshlennosti)  
Bibliography: p. 350.



IDLINA, A.G.

KOSHKIN, M.L., professor; GIL', S.A., dotsent; IDLINA, A.G., kandidat  
meditsinskikh nauk

Catarrh of the upper respiratory tract in premature infants in  
wards irradiated with ultraviolet rays. Pediatriia no.1:8-15  
Ja-F '55. (MLRA 8:5)

1. Iz kafedry obshchey gigiyeny Khar'kovskogo meditsinskogo insti-  
tuta (dir. dotsent I.F.Kononenko) i otdela fiziologii rebenka  
Ukrainskogo instituta okhrany materinstva i mladenchestva imeni  
N.K.Krupskoy (dir. kandidat meditsinskikh nauk A.I.Kornikova).

(RESPIRATORY TRACT, diseases,  
in premature inf., prev. by ultraviolet irradiation of  
tents)

(ULTRAVIOLET RAYS,  
prev. of resp. tract dis. in premature inf., irradiation  
of tents)

KOSHKIN, M.L., prof.; SHYNNIN, B.Ya., kand.med.nauk; IDLINA, A.G., kand.med.  
nauk; DUDCHENKO, I.I.

Natural ultraviolet radiation inside buildings and the disinfectant  
effect of daylight. Vrach.delo no.1:69-72 Ja '58. (MIRA 11:9)

1. Kafedra obshchey gigiyeny Khar'kovskogo meditsinskogo inst.  
(AIR--PURIFICATION) (ULTRAVIOLET RAYS)

KOSHKIN, L., prof. IDLINA, A.G., kand.med.nauk, ROYTMAN, T.A., KHODOVA, R.Z.  
DUDCHENKO, I.I.

Effect of BUV-15 lamps on children of kindergarten age [with  
summary in English]. *Pediatrics* 36 no.6:67-73 Je '58 (MIRA 11:6)

1. Iz kafedry obshchey gigieny Khar'kovskogo meditsinskogo  
instituta i Khar'kovskogo oblastnogo doma rebenka No.1.

(ULTRAVIOLET RAYS, eff.

indirect, on child develop. (Rus))

(ANTISEPTIC AND ASEPTIC,

ultraviolet irradiation in prev. of aerogenic infect.  
in schools (Rus))

(AIR, microbiology,

ultraviolet prev. of aerogenic infect. in schools (Rus))



IDLIS, A.A.

Effect of changes in the carbohydrate-phosphorus metabolism  
on cardiac activity. Fiziol. zhur. [Ukr.] 9 no.2:235-239  
Mr.-Ap '63. (MIRA 18:3)

1. Laboratoriya normal'noy fiziologii Instituta gerontologii  
i eksperimental'noy patologii AMN SSSR, Kiyev.

PA 234759

USSR/Astronomy - Planets, Formation of Sep/Oct 52

"Application of Criterion of Tidal Stability to Problem of Distribution of Satellites of Planets," G. M. Idlis, Inst of Astrophys, Acad Sci Kazakh SSR

"Astron Zhur" Vol 29, No 5, pp 556-562

Proves that all regular bodies of solar system, planets and their satellites, fit into a pattern detd by a gravitational parameter. Thus planets and their satellites were formed from diffuse matter obeying the criterion of tidal stability.

234759

This confirms the law derived by V. G. Resenkov (cf. "Astron Zhur" Vol 28, No 6, 1951) on the distribution of planets.

IDLIS, G. M.

234759

IDLIS, G. M.

USSR/Astronomy - Planetary Distances - Nov/Dec 52

"Problem of Law of Planetary Distance," G. M. Idlis, Inst of Astrophys, Acad Sci Kazakh SSR

"Astron Zhur" Vol 29, No 6, pp 694-707

Criticizes the law derived by Acad O. Yu. Shmidt for computation of radius of planetary orbit and considers agreement with real data coincidental. Concludes that only the law by V. G. Fesenkov is well derived and has phys meaning. Submitted 20 Aug 52.

239T80

IDLIS, G. M.

USSR/Astronomy - Clusters

21 Aug 53

"Criterion Governing Tidal Stability, and Distribution of Globular Clusters in Galaxies and of Stars in Globular Clusters," G. M. Idlis, *Astrophys Inst, Acad Sci Kazakh SSR*

DAN SSSR, Vol 91, No 6, pp 1305-1308

States, after V. G. Fesenkov (*Astron Zhurnal*, 28, 6, 192 (1951)), that globular stellar clusters arose by way of the condensation of certain scattered matter, which disintegrated afterwards within the limits of each cluster into a large

275757

collection of individual stars. Concludes that V. G. Fesenkov's criterion  $\delta = \alpha M_0 / R^3$  (delta - density of the individualized satellite, R - its distance from the disturbing body with mass  $M_0$ , and  $\alpha$  - a numerical coef around 10) of tidal stability permits one to explain the observed spatial distribution of any celestial bodies that arise as a result of gravitational condensation of diffuse matter, whether planets, their regular satellites, stars, or globular clusters. Presented by Acad V. G. Fesenkov 26 Jun 53.

Idlis, G. M.

Subject : USSR/Astronomy AID - P-65  
Card : 1/1  
Author : Idlis, G. M.  
Title : On the Question of the Aberration of Light  
Periodical : Astron. zhur., V. XXXI, 1, 81-84, Ja - F 1954  
Abstract : A systematic criticism of the discussion by  
S. B. Luk'yanov "Aberration of Light" (Ibid 30,  
No. 3, 302-314, 1953), which is based on the works  
of V. Pauli and P. G. Bergman. Bibliography: 9  
references given, of which 8 are Russian.  
Institution : Astrophys. Institute, Academy of Sciences of Kaz SSR  
Submitted : November 9, 1953

IDLIS, G. M.

"Cosmic Force Fields and Certain Problems of the structure and Evolution of Galactic Material." Cand Phys-Math Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 19 Jan 55. (VM, 10 Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13) SO: Sum. 598, 29 Jul 55

IDLIS, G., kandidat fiziko-matematicheskikh nauk.

Visiting session of the astronomy council of the Academy of Sciences of  
the U.S.S.R., devoted to the development of astronomy in Kazakhstan.  
Vest.AN Kazakh.SSR 11 no.9:85-87 S '55. (MLRA 9:1)  
(Kazakhstan--Astronomy)

*Idlis, G.M.*

USSR/ Astronomy - Star velocities

Card 1/1 Pub. 22 - 7/60

Authors : Idlis, G. M.

Title : The effect of galactic structure on the dispersion of peculiar velocities of the stars and interstellar clouds

Periodical : Dok. AN SSSR 100/4, 635-638, Feb 1, 1955

Abstract : A non-uniform distribution of masses in the galaxies and its effect on the dispersion of the peculiar velocities of galactic stars and star clouds is discussed. L. Spitzer and M. Schwarzschild give a formula which helps to determine the velocity of a star, if one knows the star's age  $\tau$ , namely:  $V(\tau) = V_0(1 + \frac{\tau}{\tau_E})^{1/2}$  where  $\tau_E = \frac{4V_0^2}{3\pi G \rho}$ ,  $G$  is the gravitational constant,  $m$  is the Mass of disturbing bodies and  $n$  is their number. The article considers the age of the galaxies to be of the order of  $< 10^{10}$  years. The F stars are considered as younger stars. The  $\tau_E$  for them has been calculated. It is  $\tau_E = 2 \cdot 10^8$  years. Thirty references: 21 USSR, 4 USA, 1 Japanese, 3 German and 1 Sweed. (1926-1954). Tables.

Institution : Acad. of SCS., USSR, Astrophysical Institute

Presented by: Academician V. G. Fesenkov, September 27, 1954



USSR/ Astronomy - Prominences

Card 1/1 Pub. 22 - 14/53

Authors : Idlis, G. M.; Karimov, M. G.; Delone, A. B.; and Obashev, S. O.

Title : Determination of the intensity of the magnetic field in prominences by the movement of nodes on the picture plane

Periodical : Dok. AN SSSR 102/4, 707-710, Jun 1, 1955

Abstract : Various methods of determining the magnetic field inside prominences are analyzed. Eight references: 3 USA and 5 USSR (1949-1953). Table.

Institution : The Acad. of Sc., Kaz. SSR, Astrophysical Institute, Alma Ata

Presented by: Academician V. G. Fesenkov, February 21, 1955

IDLIS, G.M.

Unsuitability of the accretional hypothesis in the problem  
of origin and evolution of white giants. Izv.Astrofiz.  
inst.AN Kazakh.SSR 2:34-40 '56. (MIRA 15:9)  
(Stars) (Cosmogony)

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